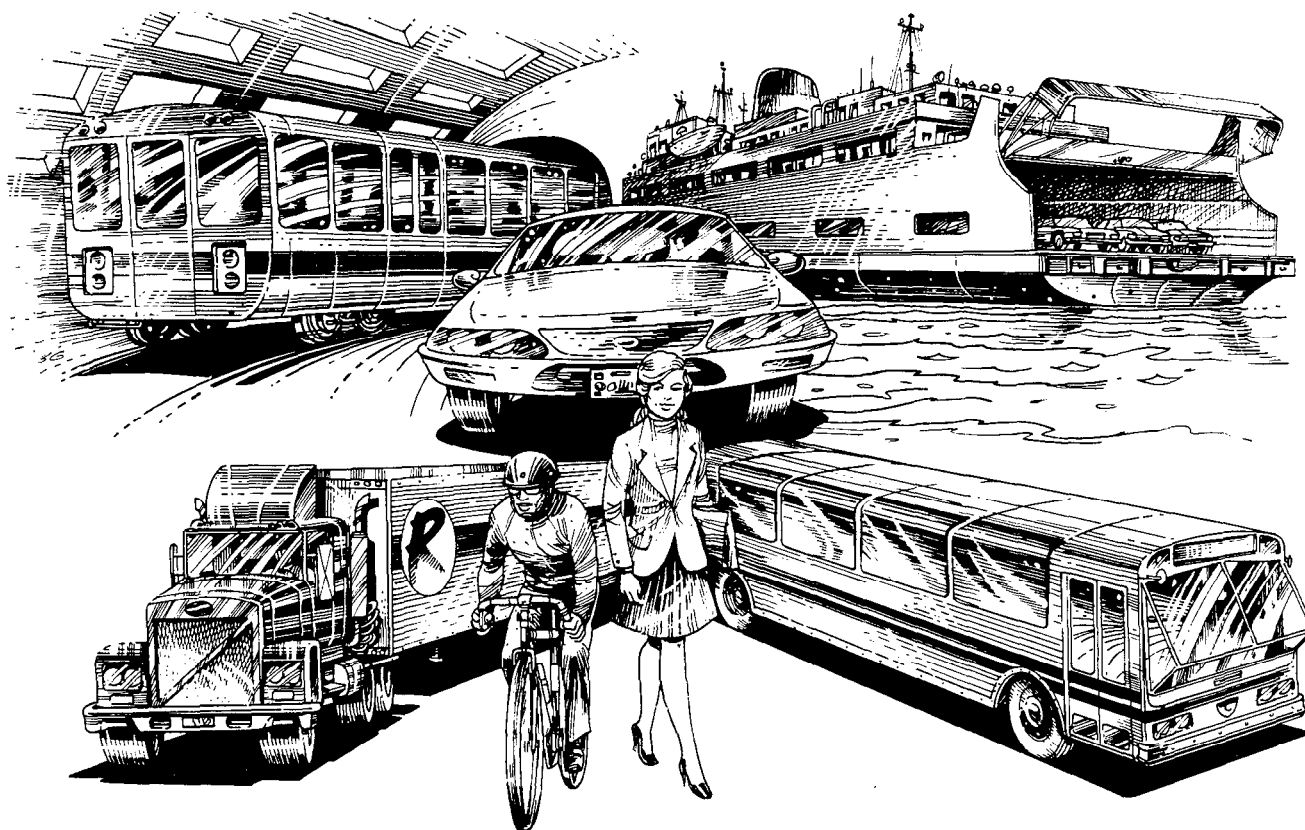




U.S. Department
of Transportation

Federal Transit
Administration

Federal Highway
Administration



PLANNING AND ENVIRONMENTAL TRAINING CATALOGUE

the first of these is the fact that the system is not in a steady state.

The second of these is the fact that the system is not in a steady state.

The third of these is the fact that the system is not in a steady state.

The fourth of these is the fact that the system is not in a steady state.

The fifth of these is the fact that the system is not in a steady state.

The sixth of these is the fact that the system is not in a steady state.

The seventh of these is the fact that the system is not in a steady state.

The eighth of these is the fact that the system is not in a steady state.

The ninth of these is the fact that the system is not in a steady state.

The tenth of these is the fact that the system is not in a steady state.

The eleventh of these is the fact that the system is not in a steady state.

The twelfth of these is the fact that the system is not in a steady state.

The thirteenth of these is the fact that the system is not in a steady state.

The fourteenth of these is the fact that the system is not in a steady state.

The fifteenth of these is the fact that the system is not in a steady state.

The sixteenth of these is the fact that the system is not in a steady state.

The seventeenth of these is the fact that the system is not in a steady state.

The eighteenth of these is the fact that the system is not in a steady state.

The nineteenth of these is the fact that the system is not in a steady state.

The twentieth of these is the fact that the system is not in a steady state.

The twenty-first of these is the fact that the system is not in a steady state.

The twenty-second of these is the fact that the system is not in a steady state.

The twenty-third of these is the fact that the system is not in a steady state.

The twenty-fourth of these is the fact that the system is not in a steady state.

The twenty-fifth of these is the fact that the system is not in a steady state.

The twenty-sixth of these is the fact that the system is not in a steady state.

The twenty-seventh of these is the fact that the system is not in a steady state.

The twenty-eighth of these is the fact that the system is not in a steady state.

The twenty-ninth of these is the fact that the system is not in a steady state.

The thirtieth of these is the fact that the system is not in a steady state.

Table of Contents

| | <u>Page</u> |
|---|-------------|
| Courses Under Development | 11 |
| Training in the Planning Stage | 12 |
| About NTI and NHI | 15 |
| Course Schedule | 15 |
| Course Requests | 16 |
| Fee Structure | 16 |
| Course Computer Requirements | 16 |
| NHI Course Sponsors Needed | 16 |

ABOUT THE TRAINING PROGRAM

The Federal Highway Administration (**FHWA**) and the Federal Transit Administration (**FTA**) offer a variety of planning and environmental training courses, workshops, and seminars to individuals primarily in Federal, state, and local government, including Metropolitan Planning Organizations (**MPO**) and Transit Authorities.

The training, which varies in length from one to four days, covers a wide variety of planning and environmental-related topics including travel demand forecasting, project traffic forecasting, transportation planning for air quality analysis, congestion and intermodal management systems, access management, and promoting improved planning partnerships. Some courses concentrate on technical aspects while others focus on policy related issues.

ABOUT THIS CATALOGUE

This **catalogue** identifies courses that are currently available as well as courses that are under development or which are planned for future development. An **FTA** or **FHWA** contact is provided for each course that is currently available or under development. These individuals are available to answer technical questions about the training subject. For information on registering for, attending or sponsoring an National Highway Institute (**NHI**) course (those with **5-digit** course numbers), the **NHI** contact is Al Miller. The name of the National Transit Institute (**NTI**) person that can provide information on registration for currently available courses is listed with each **NTI** course.

The **catalogue** also provides details on how agencies and organizations can arrange to sponsor an **NHI** course and how individuals wishing to attend a particular course can determine when and where that course is being offered.

COURSES CURRENTLY OFFERED

In the following course list, each course is referenced by its **NHI (5 digit)** or **NTI (4 digit)** course number and title followed by a brief description including the course length. For more detailed technical information on any of these courses, you may call the listed contact person. Unless otherwise indicated, the contact is an **FHWA** staff member. For specific information on the process to host or register for a course, see the section on the **NHI** and the **NTI**.

9401: Major Investment Studies

Contact:

Donald Emerson, **FTA (202) 366-0096**

Sheldon Edner, **FHWA (202) 366-4066**

Linda Howe, **NTI (908) 932-1700**

This **3-day** course is designed to help states, transit operators, and metropolitan planning organizations carry out the planning requirements for major metropolitan transportation investments. Designed for the study manager, the course provides an overview of the procedural and technical aspects of major investment studies. Topics covered in lectures, group discussions and workshops include: the reasons for doing a Major Investment Study (MIS), the relationship of the MIS to the planning and environmental processes, the identification and evaluation of alternatives, travel forecasting, cost estimating, environmental analysis, financial analysis, and study management.

Target Audience: Senior planners working for state Departments of Transportation (DOT), **MPOs**, transit operators, local governments, and consultants who are responsible for managing a major investment study.

ABOUT THE TRAINING PROGRAM

The Federal Highway Administration (**FHWA**) and the Federal Transit Administration (**FTA**) offer a variety of planning and environmental training courses, workshops, and seminars to individuals primarily in Federal, state, and local government, including Metropolitan Planning Organizations (**MPO**) and Transit Authorities.

The training, which varies in length from one to four days, covers a wide variety of planning and environmental-related topics including travel demand forecasting, project traffic forecasting, transportation planning for air quality analysis, congestion and intermodal management systems, access management, and promoting improved planning partnerships. Some courses concentrate on technical aspects while others focus on policy related issues.

ABOUT THIS CATALOGUE

This **catalogue** identifies courses that are currently available as well as courses that are under development or which are planned for future development. An **FTA** or **FHWA** contact is provided for each course that is currently available or under development. These individuals are available to answer technical questions about the training subject. For information on registering for, attending or sponsoring an National Highway Institute (**NHI**) course (those with **5-digit** course numbers), the **NHI** contact is Al Miller. The name of the National Transit Institute (**NTI**) person that can provide information on registration for currently available courses is listed with each **NTI** course.

The **catalogue** also provides details on how agencies and organizations can arrange to sponsor an **NHI** course and how individuals wishing to attend a particular course can determine when and where that course is being offered.

COURSES CURRENTLY OFFERED

In the following course list, each course is referenced by its **NHI (5 digit)** or **NTI (4 digit)** course number and title followed by a brief description including the course length. For more detailed technical information on any of these courses, you may call the listed contact person. Unless otherwise indicated, the contact is an **FHWA** staff member. For specific information on the process to host or register for a course, see the section on the **NHI** and the **NTI**.

9401: Major Investment Studies

Contact:

Donald Emerson, **FTA (202) 366-0096**
Sheldon Edner, **FHWA (202) 366-4066**
Linda Howe, **NTI (908) 932-1700**

This **3-day** course is designed to help states, transit operators, and metropolitan planning organizations carry out the planning requirements for major metropolitan transportation investments. Designed for the study manager, the course provides an overview of the procedural and technical aspects of major investment studies. Topics covered in lectures, group discussions and workshops include: the reasons for doing a Major Investment Study (MIS), the relationship of the MIS to the planning and environmental processes, the identification and evaluation of alternatives, travel forecasting, cost estimating, environmental analysis, financial analysis, and study management.

Target Audience: Senior planners working for state Departments of Transportation (DOT), **MPOs**, transit operators, local governments, and consultants who are responsible for managing a major investment study.

ABOUT THE TRAINING PROGRAM

The Federal Highway Administration (**FHWA**) and the Federal Transit Administration (**FTA**) offer a variety of planning and environmental training courses, workshops, and seminars to individuals primarily in Federal, state, and local government, including Metropolitan Planning Organizations (**MPO**) and Transit Authorities.

The training, which varies in length from one to four days, covers a wide variety of planning and environmental-related topics including travel demand forecasting, project traffic forecasting, transportation planning for air quality analysis, congestion and intermodal management systems, access management, and promoting improved planning partnerships. Some courses concentrate on technical aspects while others focus on policy related issues.

ABOUT THIS CATALOGUE

This **catalogue** identifies courses that are currently available as well as courses that are under development or which are planned for future development. An **FTA** or **FHWA** contact is provided for each course that is currently available or under development. These individuals are available to answer technical questions about the training subject. For information on registering for, attending or sponsoring an National Highway Institute (**NHI**) course (those with **5-digit** course numbers), the **NHI** contact is Al Miller. The name of the National Transit Institute (**NTI**) person that can provide information on registration for currently available courses is listed with each **NTI** course.

The **catalogue** also provides details on how agencies and organizations can arrange to sponsor an **NHI** course and how individuals wishing to attend a particular course can determine when and where that course is being offered.

COURSES CURRENTLY OFFERED

In the following course list, each course is referenced by its **NHI (5 digit)** or **NTI (4 digit)** course number and title followed by a brief description including the course length. For more detailed technical information on any of these courses, you may call the listed contact person. Unless otherwise indicated, the contact is an **FHWA** staff member. For specific information on the process to host or register for a course, see the section on the **NHI** and the **NTI**.

9401: Major Investment Studies

Contact:

Donald Emerson, **FTA (202) 366-0096**

Sheldon Edner, **FHWA (202) 366-4066**

Linda Howe, **NTI (908) 932-1700**

This **3-day** course is designed to help states, transit operators, and metropolitan planning organizations carry out the planning requirements for major metropolitan transportation investments. Designed for the study manager, the course provides an overview of the procedural and technical aspects of major investment studies. Topics covered in lectures, group discussions and workshops include: the reasons for doing a Major Investment Study (MIS), the relationship of the MIS to the planning and environmental processes, the identification and evaluation of alternatives, travel forecasting, cost estimating, environmental analysis, financial analysis, and study management.

Target Audience: Senior planners working for state Departments of Transportation (DOT), **MPOs**, transit operators, local governments, and consultants who are responsible for managing a major investment study.

option is used to demonstrate the wetlands assessment and analysis techniques presented in the course, and includes wetlands regulations, wetlands ecology, and mitigation planning. The classroom/field option is available in three and four day versions. Selection of the **2, 3, or 4-day** course version should be determined after discussion with the *Contact*.

Target Audience: Primarily for state DOT personnel who have professional/technical responsibilities relating to highway design, construction, operation, or maintenance activities affecting wetlands. Other Federal, state, local government, and industry personnel with related responsibilities may be permitted to attend on a space available basis.

14226: Visual Impact Assessment for Highway Projects

Contact: Gene Johnson (202) 366-2071

This course is designed to provide the highway professional with an understanding of the process used in the development of a visual impact analysis. It provides guidance on the identification, assessment, and evaluation of visual resources. The course also explains how highway projects are to be assessed and evaluated to determine their effects upon visual resources. It illustrates how the resulting assessment information can be used in making decisions about managing visual resources in the Planning and Maintenance of Highway Projects.

Target Audience: Federal and state personnel who are directly or indirectly responsible for identifying and analyzing visual impacts resulting from highway improvements.

14228: Environmental Training Center

Contact: Bob Wheeler (202) 366-2029

This three week program has been designed to provide participants with the tools needed to manage the environmental process for transportation agencies. The Environmental Training Center will focus on methods to fully integrate environmental considerations into agency policies, procedures, and the project decision making process. The course emphasizes early and continuous involvement of Federal, state, and local governments and the increased decisionmaking role of environmental agencies such as the Environmental Protection Agency and the Army Corps of Engineers. Technical requirements for environmental documents under **NEPA** will be addressed in light of the organizational and functional relationships that identify the importance and interrelationship of the various environmental requirements which apply to transportation programs. The goal is to manage the transportation planning and project development processes in such a way that good project decisions are made through collaboration with all significant stakeholders and that environmental commitments are accomplished.

Target Audience: Employees of Federal, state and local transportation agencies or consultants working for those agencies who have responsibilities in the areas of environmental program management, environmental impact identification and analysis or who are involved in environmental document review and/or preparation. Participants may have responsibility for addressing environmental impacts of transportation projects either in the transportation planning or project development process. Participants should have a basic knowledge of Federal environmental legislation.

**15121: Administration of FHWA
Planning Grants**

Contact: Tony Solury (202) 366-5003

This two day course provides a basic understanding of the responsibilities and relationships that exist between FHWA, the state, and metropolitan planning organizations in the administration of FHWA planning grants. This course is updated as necessary to include the most recent administrative and legislative changes including revisions to Office of Management and Budget Circulars A-87 and A-102, 49 CFR Part 18, and 23 CFR, Part 420.

Target Audience: Federal, state, MPO, and local planning agency personnel that are involved with the use and administration of FHWA planning grants.

**15127: Statewide Transportation Planning
Procedures**

Contact: Bob Gorman (202) 366-5001

This multi-day (usually 4 day) course provides a basic understanding of the ISTEA statewide transportation planning requirements and an in-depth understanding of the practices and procedures for statewide transportation planning. It is oriented to state DOT staff involved in developing state transportation plans and programs. Topics discussed include: the statewide transportation planning process, systems analysis procedures, management systems, data needs and collection procedures, needs estimation, Clean Air requirements, project level analyses, intermodal issues and public involvement.

Target Audience: State and Federal planning professionals and new managers that desire a fast-paced review of the state-of-the-practice.

**15129: Application of GIS for
Transportation**

Contact Roger Petzold (202) 366-4074

A Geographic Information System (GIS) is a system of hardware, software, data, people, organizations and institutional arrangements for collecting, storing, analyzing, and disseminating information about areas of the earth. Geographic Information System for Transportation is the adaptation of the technology to transportation issues specific to the management and analysis of transportation networks.

Target Audience: Federal and state personnel, MPO, transit agencies, and local governments that are interested in the implementation of a GIS for Transportation

**15130: Corridor Preservation for
Technical Staff**

Contact Robert Wheeler (202) 366-2029

This course explains the objectives of corridor preservation and presents case studies illustrating the application of corridor preservation efforts. The course includes discussion in the following areas: 1) the nature and magnitude of the problem corridor preservation is intended to address; 2) the impact of the National Environmental Policy Act on corridor preservation; 3) use of the products from the transportation planning process; 4) land use controls; and, 5) public/private partnerships. The case studies identify various approaches to corridor preservation including different levels of corridor analysis (i.e., planning studies, feasibility analyses, and phased environmental documents) and various types of land use controls.

Target Audience: Technical staff involved in project development, planning, project development, and right-of-way functions at the Federal, state, and local levels.

**15121: Administration of FHWA
Planning Grants**

Contact: Tony Solury (202) 366-5003

This two day course provides a basic understanding of the responsibilities and relationships that exist between FHWA, the state, and metropolitan planning organizations in the administration of FHWA planning grants. This course is updated as necessary to include the most recent administrative and legislative changes including revisions to Office of Management and Budget Circulars A-87 and A-102, 49 CFR Part 18, and 23 CFR, Part 420.

Target Audience: Federal, state, MPO, and local planning agency personnel that are involved with the use and administration of FHWA planning grants.

**15127: Statewide Transportation Planning
Procedures**

Contact: Bob Gorman (202) 366-5001

This multi-day (usually 4 day) course provides a basic understanding of the ISTEA statewide transportation planning requirements and an in-depth understanding of the practices and procedures for statewide transportation planning. It is oriented to state DOT staff involved in developing state transportation plans and programs. Topics discussed include: the statewide transportation planning process, systems analysis procedures, management systems, data needs and collection procedures, needs estimation, Clean Air requirements, project level analyses, intermodal issues and public involvement.

Target Audience: State and Federal planning professionals and new managers that desire a fast-paced review of the state-of-the-practice.

**15129: Application of GIS for
Transportation**

Contact Roger Petzold (202) 366-4074

A Geographic Information System (GIS) is a system of hardware, software, data, people, organizations and institutional arrangements for collecting, storing, analyzing, and disseminating information about areas of the earth. Geographic Information System for Transportation is the adaptation of the technology to transportation issues specific to the management and analysis of transportation networks.

Target Audience: Federal and state personnel, MPO, transit agencies, and local governments that are interested in the implementation of a GIS for Transportation

**15130: Corridor Preservation for
Technical Staff**

Contact Robert Wheeler (202) 366-2029

This course explains the objectives of corridor preservation and presents case studies illustrating the application of corridor preservation efforts. The course includes discussion in the following areas: 1) the nature and magnitude of the problem corridor preservation is intended to address; 2) the impact of the National Environmental Policy Act on corridor preservation; 3) use of the products from the transportation planning process; 4) land use controls; and, 5) public/private partnerships. The case studies identify various approaches to corridor preservation including different levels of corridor analysis (i.e., planning studies, feasibility analyses, and phased environmental documents) and various types of land use controls.

Target Audience: Technical staff involved in project development, planning, project development, and right-of-way functions at the Federal, state, and local levels.

**15250: Capacity and Planning Analysis
for Arterial Analysis**

Contact: Ron Giguere (202) 366-2203

The three day course introduces techniques both for determining the demand on arterial facilities and for evaluating the performance of intersections, ~~arterials~~, and corridors. The four day course includes freeway facilities as well. Discussions focus on the latest material from the ~~1985~~ Highway Capacity Manual much of which has been or is being revised. The course is constantly being updated to reflect these changes. Methods and tools to evaluate arterial and freeway components (four day course only) at both the planning and operational levels are presented. Specific data requirements along with procedures for estimating turning movements and determining service volumes are also discussed. In addition to lectures, the course incorporates software demonstrations and microcomputer workshops to apply analytical techniques. Hands-on exercises employ widely used microcomputer programs. In the software applications, emphasis is placed on understanding the inputs and interpreting the outputs.

Target Audience: Federal, state, and local transportation planners and engineers who are or may be involved in capacity and traffic analysis of existing or future facilities.

**15253: Site Traffic Impact Analysis and
Assessment**

Contact: Brian Gardner (202) 366-4061

This three day course will present the major elements and recommended practices for site impact analysis and assessment. It replaces the current Site Impact Traffic Evaluation course (same course number). The technical, administrative, economic and legal issues surrounding these topics will be addressed, as will relevant travel demand management and access design issues and techniques. The lectures and course

materials will be supplemented by workshops, case studies, and examples.

Available summer ~~1995~~.

Target Audience: State and local transportation planners and engineers who are involved in the development or review of traffic analyses for new developments.

**15254: Introduction to Urban Travel
Demand Forecasting**

Contact: ~~FTA~~, Nancy Grubb (202) 366-0096
~~FHWA~~, Barry Zimmer (202) 366-4082

This is a four-day ~~introductory~~ course in travel demand forecasting. It covers, through lectures and workshops, the traditional four step planning process: trip generation, trip distribution, mode choice, and traffic assignment. It also includes lectures on information needs and the development of networks and zone structures. This course is offered both in the field and at Headquarters in Washington, D.C. The headquarters course, usually presented the first week of March and October, includes software demonstrations of transportation planning microcomputer applications to problems previously solved manually in class.

There are three options to the field course. It can be presented: **(1)** using the microcomputer package used by the host agency to reinforce the theory taught; **(2)** as a non-computerized course with hand-solved workshop problems; or **(3)** as the Urban Transportation Planning System (**UTPS**) course (formerly Course **15206**).

Target Audience: Federal, state, and local planners relatively new to planning who wish to gain a better understanding of the principles and techniques of travel demand forecasting.

15255: Access Management, Location and Design

Contact: Ron Giguere (202) 366-2203

This three day course provides a comprehensive and detailed discussion of access management for streets and highways. This course has been updated to include material from the new National Cooperative Highway Research Program report, "Access Management Guidelines for Activity Centers," material from the 1993 National Conference on Access Management, and additional information on developing, implementing and administering a comprehensive access management program. Course elements include: benefits and issues related to access management; access design principles, management programs and policies; techniques for controlling access; retrofit access control techniques in developed areas; access design and location guidelines; site access and site plans; and evaluation of access improvement strategies.

Target Audience: State and local planning and design technical staffs and land use planners.

15256: Innovative Highway Financing and Elements of Financial Planning: Technical Methodologies

Contact: Bill Marley (202) 366-5009

This two day course discusses five types of innovative highway financing: public/private agreements, impact fees, special assessment districts, innovative toll projects, and local option taxes. Case studies are used to present the financing history of several innovative techniques for financing projects with substantial private sector involvement. In addition, the course incorporates four computer workshops which utilize public domain software related to special assessment districts, impact fees, toll rates and revenue expenditure forecasts. This course is a com-

panion to the NTI course, #9402, "Financial Planning and Programming for MPOs".

Target Audience: State DOT, MPO and member agencies including transit authorities, and local government employees, and other staff responsible for all or any of the following: 1) the design, development, review, and operation of innovative financing techniques, 2) incorporation and programming of the techniques into financial planning procedures, 3) financial review of plans, metropolitan TIPS, and Statewide TIPS (STIPs).

15257: Estimating the Impacts of Transportation Alternatives

Contact: Patrick DeCorla-Souza
(202) 366-4076

This three day course provides guidance on estimating costs, benefits and impacts for evaluation of highway, mass transit, and demand management alternatives at the system level, as well as for screening alternatives at the corridor/subarea and project levels. Topics to be covered include estimation of public and private costs; air pollutant emissions; energy consumption; safety/ security, economic development, equity and other social and environmental impacts; and techniques for cost-benefit and cost-effectiveness analysis. Software for estimating impacts will be introduced through hands-on workshops. While this course in its current construction deals only with highway examples, the innovative financing methodologies are applicable to other modes.

Target Audience: Federal, state, MPO, local government, and transit agency planning staffs.

15255: Access Management, Location and Design

Contact: Ron Giguere (202) 366-2203

This three day course provides a comprehensive and detailed discussion of access management for streets and highways. This course has been updated to include material from the new National Cooperative Highway Research Program report, "Access Management Guidelines for Activity Centers," material from the 1993 National Conference on Access Management, and additional information on developing, implementing and administering a comprehensive access management program. Course elements include: benefits and issues related to access management; access design principles, management programs and policies; techniques for controlling access; retrofit access control techniques in developed areas; access design and location guidelines; site access and site plans; and evaluation of access improvement strategies.

Target Audience: State and local planning and design technical staffs and land use planners.

15256: Innovative Highway Financing and Elements of Financial Planning: Technical Methodologies

Contact: Bill Marley (202) 366-5009

This two day course discusses five types of innovative highway financing: public/private agreements, impact fees, special assessment districts, innovative toll projects, and local option taxes. Case studies are used to present the financing history of several innovative techniques for financing projects with substantial private sector involvement. In addition, the course incorporates four computer workshops which utilize public domain software related to special assessment districts, impact fees, toll rates and revenue expenditure forecasts. This course is a com-

panion to the NTI course, #9402, "Financial Planning and Programming for MPOs".

Target Audience: State DOT, MPO and member agencies including transit authorities, and local government employees, and other staff responsible for all or any of the following: 1) the design, development, review, and operation of innovative financing techniques, 2) incorporation and programming of the techniques into financial planning procedures, 3) financial review of plans, metropolitan TIPS, and Statewide TIPS (STIPs).

15257: Estimating the Impacts of Transportation Alternatives

Contact: Patrick DeCorla-Souza (202) 366-4076

This three day course provides guidance on estimating costs, benefits and impacts for evaluation of highway, mass transit, and demand management alternatives at the system level, as well as for screening alternatives at the corridor/subarea and project levels. Topics to be covered include estimation of public and private costs; air pollutant emissions; energy consumption; safety/ security, economic development, equity and other social and environmental impacts; and techniques for cost-benefit and cost-effectiveness analysis. Software for estimating impacts will be introduced through hands-on workshops. While this course in its current construction deals only with highway examples, the innovative financing methodologies are applicable to other modes.

Target Audience: Federal, state, MPO, local government, and transit agency planning staffs.

15255: Access Management, Location and Design

Contact: Ron Giguere (202) 366-2203

This three day course provides a comprehensive and detailed discussion of access management for streets and highways. This course has been updated to include material from the new National Cooperative Highway Research Program report, "Access Management Guidelines for Activity Centers," material from the 1993 National Conference on Access Management, and additional information on developing, implementing and administering a comprehensive access management program. Course elements include: benefits and issues related to access management; access design principles, management programs and policies; techniques for controlling access; retrofit access control techniques in developed areas; access design and location guidelines; site access and site plans; and evaluation of access improvement strategies.

Target Audience: State and local planning and design technical staffs and land use planners.

15256: Innovative Highway Financing and Elements of Financial Planning: Technical Methodologies

Contact: Bill Marley (202) 366-5009

This two day course discusses five types of innovative highway financing: public/private agreements, impact fees, special assessment districts, innovative toll projects, and local option taxes. Case studies are used to present the financing history of several innovative techniques for financing projects with substantial private sector involvement. In addition, the course incorporates four computer workshops which utilize public domain software related to special assessment districts, impact fees, toll rates and revenue expenditure forecasts. This course is a com-

panion to the NTI course, #9402, "Financial Planning and Programming for MPOs".

Target Audience: State DOT, MPO and member agencies including transit authorities, and local government employees, and other staff responsible for all or any of the following: 1) the design, development, review, and operation of innovative financing techniques, 2) incorporation and programming of the techniques into financial planning procedures, 3) financial review of plans, metropolitan TIPS, and Statewide TIPS (STIPs).

15257: Estimating the Impacts of Transportation Alternatives

Contact: Patrick DeCorla-Souza (202) 366-4076

This three day course provides guidance on estimating costs, benefits and impacts for evaluation of highway, mass transit, and demand management alternatives at the system level, as well as for screening alternatives at the corridor/subarea and project levels. Topics to be covered include estimation of public and private costs; air pollutant emissions; energy consumption; safety/ security, economic development, equity and other social and environmental impacts; and techniques for cost-benefit and cost-effectiveness analysis. Software for estimating impacts will be introduced through hands-on workshops. While this course in its current construction deals only with highway examples, the innovative financing methodologies are applicable to other modes.

Target Audience: Federal, state, MPO, local government, and transit agency planning staffs.

15255: Access Management, Location and Design

Contact: Ron Giguere (202) 366-2203

This three day course provides a comprehensive and detailed discussion of access management for streets and highways. This course has been updated to include material from the new National Cooperative Highway Research Program report, "Access Management Guidelines for Activity Centers," material from the 1993 National Conference on Access Management, and additional information on developing, implementing and administering a comprehensive access management program. Course elements include: benefits and issues related to access management; access design principles, management programs and policies; techniques for controlling access; retrofit access control techniques in developed areas; access design and location guidelines; site access and site plans; and evaluation of access improvement strategies.

Target Audience: State and local planning and design technical staffs and land use planners.

15256: Innovative Highway Financing and Elements of Financial Planning: Technical Methodologies

Contact: Bill Marley (202) 366-5009

This two day course discusses five types of innovative highway financing: public/private agreements, impact fees, special assessment districts, innovative toll projects, and local option taxes. Case studies are used to present the financing history of several innovative techniques for financing projects with substantial private sector involvement. In addition, the course incorporates four computer workshops which utilize public domain software related to special assessment districts, impact fees, toll rates and revenue expenditure forecasts. This course is a com-

panion to the NTI course, #9402, "Financial Planning and Programming for MPOs".

Target Audience: State DOT, MPO and member agencies including transit authorities, and local government employees, and other staff responsible for all or any of the following: 1) the design, development, review, and operation of innovative financing techniques, 2) incorporation and programming of the techniques into financial planning procedures, 3) financial review of plans, metropolitan TIPS, and Statewide TIPS (STIPs).

15257: Estimating the Impacts of Transportation Alternatives

Contact: Patrick DeCorla-Souza
(202) 366-4076

This three day course provides guidance on estimating costs, benefits and impacts for evaluation of highway, mass transit, and demand management alternatives at the system level, as well as for screening alternatives at the corridor/subarea and project levels. Topics to be covered include estimation of public and private costs; air pollutant emissions; energy consumption; safety/ security, economic development, equity and other social and environmental impacts; and techniques for cost-benefit and cost-effectiveness analysis. Software for estimating impacts will be introduced through hands-on workshops. While this course in its current construction deals only with highway examples, the innovative financing methodologies are applicable to other modes.

Target Audience: Federal, state, MPO, local government, and transit agency planning staffs.

Statewide Transportation Planning

Contact: Dee Spann (202) 366-4086

This multi-day (usually 4 day) course is under development. It will provide an understanding of the **ISTEA** statewide transportation planning requirements and an opportunity for more in-depth understanding of practices and procedures for intermodal statewide transportation planning. It will be oriented to staff involved in statewide transportation planning including State **DOTs**, modal partners (railroads, bus companies, trucking companies, ports, shippers, etc.). Topics discussed will include: the process and organization for statewide transportation planning, the principal products of the process (plan and state TIP), relationship of management systems to the planning process, relationship of statewide planning to metropolitan planning, the **23** factors, public involvement, the technical aspects of transportation planning (data and data collection, system forecasting, needs studies, project development, etc.).

Highway Runoff Water Quality

Contact: Fred Bank (202) 366-5004

FHWA's existing course material on highway runoff water quality will be re-organized, with stand-alone training modules. The modules will cover specific subjects, such as planning for water quality protection, constituent monitoring, assessing the potential for impacts, mitigation planning, design of drainage features, etc. Individual training sessions will consist of one or more of the modules, as requested by the sponsoring agency, based on the needs of the personnel in a particular locality.

Target Audience: State DOT, local transportation and **FHWA** personnel responsible for water quality issues when planning, designing and implementing transportation improvements.

Advanced Historic Preservation Course

Contact: Bruce Eberle (202) 366-2060

This training will be developed as an upgrade and extension of the existing course, #14211. It will incorporate National Historic Preservation Act amendments and Advisory Council regulations and policy changes resulting from the passage of **ISTEA** and other issues, such as historic landscapes and Native American concerns. The training will be presented by a team of principle participants in the historic preservation process.

Target Audience: State, regional, local, and federal staff,

TRAINING IN THE PLANNING STAGE

The following topics have been identified for development into new courses, seminars or modules for inclusion in current courses.

. **Market Segmentation in Transit Operations and Available Service Options**

This course will cover methods to identify segments of the transit market and match those segments with available service options. The course will address market segments addressing transit access (such as bicycle on transit and telecommuting) as well as the nature of service including big bus/little bus, express service, bus trolleys, and light rail. Tools for determining resource and demand requirements of service options as well as ridership estimates and other requirements will be presented. Examples of alternative service options implemented in areas having completed market segmentation studies will be incorporated into the course. The course will address transportation demand management as a segmentation strategy. It will also address the uniform fleet issue in the provision of alternative service options.

. **Transportation and Land Use Course**

This course should cover a variety of topics related to the linkages between land use and transportation including: population and employment forecasting at the regional, subarea, and activity center levels; trip generation characteristics of different land use types and densities, including mixed use development; land use strategies to reduce travel demand (what strategies have been tried, and what do we know about their effectiveness); techniques for estimating the land use impacts of transportation alternatives; joint development; corridor preservation; and current topics (livable communities, Enterprise Communities/ Empowerment Zones etc.).

. **Land Use Planning and Air Quality Considerations for Comprehensive Planners and Developers**

The course will describe the relationships among air quality considerations, economic development, land development, and transportation. It will provide an understanding of the impacts which traditional land use development has on economic development in terms of the carrying capacity of transportation systems, air quality, etc. At the development, project, and activity center level, the course will show the different transportation impacts of different design concepts. At the regional level, it will show the gross impacts of suburban, low-density, auto-oriented development on economic development, transportation efficiency, transportation costs, and taxation. The course will present the economic and development benefits of alternative types of land development and air quality considerations. The focus of the course will be on land development rate of return ~~not~~ social benefits.

. **GIS Application for MPOs**

This topic will most likely be a new module for #1 5129, Application of Geographic Information Systems (**GIS**) for Transportation. This module will cover applications of

GIS for such activities as congestion and intermodal management systems, project development activities and major investment studies, and environmental impact analysis.

■ **Intermodal Terminals Seminar**

The objective of this seminar is to identify, review, and synthesize the results of these discussions and identify gaps in theory or information for the planning and design of intermodal terminals. This seminar will explore with the sponsors of a representative number of terminals a number of issues and factors that would define what has worked and what has not within the overall original planning context for their intermodal facility. The issues and factors which could be focused on include, but are not limited to; ridership, passenger usage, design criteria, operating efficiencies, safety and security, passenger flow ~~modelling/simulation~~, capital cost, maintenance costs, siting/design, joint development potential, etc. The seminar participants, by invitation only determined by a steering committee, will include those with intermodal terminals already operating and /or with terminals planned.

. **Introduction to Transportation System Planning**

This course will review the procedural and technical aspects of system planning. The procedural elements of the **FTA/FHWA** planning regulations to be reviewed include: **MPO** designation; role of system planning in the development of planning products; roles and responsibilities of agencies involved; clean air conformity; and citizen participation. Technical elements of the course include an introduction to: travel demand forecasting; land use forecasts and plans; financial planning; identification of transportation needs; identification, development and evaluation of alternatives; definition of management systems and their role in system planning; major investment studies; regional and subarea analyses, emissions forecasts, and inclusion of other environmental impacts.

. **Transportation and Land Use Course**

This course should cover a variety of topics related to the linkages between land use and transportation including: population and employment forecasting at the regional, subarea, and activity center levels; trip generation characteristics of different land use types and densities, including mixed use development; land use strategies to reduce travel demand (what strategies have been tried, and what do we know about their effectiveness); techniques for estimating the land use impacts of transportation alternatives; joint development; corridor preservation; and current topics (livable communities, Enterprise Communities/ Empowerment Zones etc.).

. **Land Use Planning and Air Quality Considerations for Comprehensive Planners and Developers**

The course will describe the relationships among air quality considerations, economic development, land development, and transportation. It will provide an understanding of the impacts which traditional land use development has on economic development in terms of the carrying capacity of transportation systems, air quality, etc. At the development, project, and activity center level, the course will show the different transportation impacts of different design concepts. At the regional level, it will show the gross impacts of suburban, low-density, auto-oriented development on economic development, transportation efficiency, transportation costs, and taxation. The course will present the economic and development benefits of alternative types of land development and air quality considerations. The focus of the course will be on land development rate of return ~~not~~ social benefits.

. **GIS Application for MPOs**

This topic will most likely be a new module for ~~#1 5129~~, Application of Geographic Information Systems (**GIS**) for Transportation. This module will cover applications of

GIS for such activities as congestion and intermodal management systems, project development activities and major investment studies, and environmental impact analysis.

■ **Intermodal Terminals Seminar**

The objective of this seminar is to identify, review, and synthesize the results of these discussions and identify gaps in theory or information for the planning and design of intermodal terminals. This seminar will explore with the sponsors of a representative number of terminals a number of issues and factors that would define what has worked and what has not within the overall original planning context for their intermodal facility. The issues and factors which could be focused on include, but are not limited to; ridership, passenger usage, design criteria, operating efficiencies, safety and security, passenger flow ~~modelling/simulation~~, capital cost, maintenance costs, siting/design, joint development potential, etc. The seminar participants, by invitation only determined by a steering committee, will include those with intermodal terminals already operating and /or with terminals planned.

. **Introduction to Transportation System Planning**

This course will review the procedural and technical aspects of system planning. The procedural elements of the **FTA/FHWA** planning regulations to be reviewed include: **MPO** designation; role of system planning in the development of planning products; roles and responsibilities of agencies involved; clean air conformity; and citizen participation. Technical elements of the course include an introduction to: travel demand forecasting; land use forecasts and plans; financial planning; identification of transportation needs; identification, development and evaluation of alternatives; definition of management systems and their role in system planning; major investment studies; regional and subarea analyses, emissions forecasts, and inclusion of other environmental impacts.

■ **Design and Application of Travel
Demand Management (TDM) Tech
niques Including Telecommuting**

This four-day course is designed to show participants how to plan, develop, design, operate and evaluate **TDM** programs for the public and private sectors. Specific information will be presented on the effectiveness of a broad range of **TDM** actions that cover improved services, incentives, disincentives, and alternative work arrangements including **telecommuting**. Guidance will be presented on developing and evaluating **TDM** programs at work sites. A computer model to evaluate the impact of **TDM** programs will also be demonstrated. The lecture/discussion format provides an opportunity to understand tools developed jointly by **FHWA** and **FTA**.

Prerequisite: Participants should have employment in or responsibility for **TDM** programs.

■ **Environmental Leadership Seminar**

This seminar is intended to clarify the leadership role required to promote the new policy initiatives, tools, and methods necessitated by the emphasis on environmental preservation expressed in the US Department of Transportation Strategic Plan and the **FHWA** Environmental Policy Statement. The seminar will identify the roles of stakeholders in the transportation planning and project development process. It will emphasize communication and collaboration skills needed by managers to bring stakeholders into the process, seek new partnerships, and reach those historically underserved by the transportation system. The seminar will also discuss methods of project planning that better integrate transportation, environmental, and land use issues.

■ **Introduction to Transit**

The course will be designed to provide basic information on a wide range of transit matters. Topics will include: history of transit; history of Federal transit programs; structure of transit agencies; route scheduling; transit finance; transit/land use linkages; interest groups in transit; labor issues; transit travel and demographic characteristics; **paratransit**; and social, environmental, and energy issues. The course will include discussions relating to the joint planning regulations, livable communities, and Americans with Disabilities Act.

ABOUT NTI/AND NHI

The **NTI** was created by **ISTEA** to "...develop and administer... training programs..." [49 USC §5315(a)]. Located at Rutgers University, **NTI** provides training at locations around the country to help states and localities meet the statutory requirements of the planning program. It also provides training geared to other agency needs.

The **NHI** is the technical training arm of **FHWA** and is part of the **FHWA** Office of Research and Development. **NHI's** role is to facilitate technology transfer by serving as a bridge between research and the practical application of new technology for state, local and private sector organizations involved in transportation. **NHI** makes training courses available to transportation agencies.

COURSE SCHEDULE

For **NHI** course schedules, call the contact person for the course or Mr. Al Miller of **NHI** at (703) 285-2787.

The most current schedule for any particular **NTI** course can be obtained from the **NTI** contact listed following that course's description.

■ **Design and Application of Travel
Demand Management (TDM) Tech
niques Including Telecommuting**

This four-day course is designed to show participants how to plan, develop, design, operate and evaluate **TDM** programs for the public and private sectors. Specific information will be presented on the effectiveness of a broad range of **TDM** actions that cover improved services, incentives, disincentives, and alternative work arrangements including **telecommuting**. Guidance will be presented on developing and evaluating **TDM** programs at work sites. A computer model to evaluate the impact of **TDM** programs will also be demonstrated. The lecture/discussion format provides an opportunity to understand tools developed jointly by **FHWA** and **FTA**.

Prerequisite: Participants should have employment in or responsibility for **TDM** programs.

■ **Environmental Leadership Seminar**

This seminar is intended to clarify the leadership role required to promote the new policy initiatives, tools, and methods necessitated by the emphasis on environmental preservation expressed in the US Department of Transportation Strategic Plan and the **FHWA** Environmental Policy Statement. The seminar will identify the roles of stakeholders in the transportation planning and project development process. It will emphasize communication and collaboration skills needed by managers to bring stakeholders into the process, seek new partnerships, and reach those historically underserved by the transportation system. The seminar will also discuss methods of project planning that better integrate transportation, environmental, and land use issues.

■ **Introduction to Transit**

The course will be designed to provide basic information on a wide range of transit matters. Topics will include: history of transit; history of Federal transit programs; structure of transit agencies; route scheduling; transit finance; transit/land use linkages; interest groups in transit; labor issues; transit travel and demographic characteristics; **paratransit**; and social, environmental, and energy issues. The course will include discussions relating to the joint planning regulations, livable communities, and Americans with Disabilities Act.

ABOUT NTI/AND NHI

The **NTI** was created by **ISTEA** to "...develop and administer... **training** programs. ." [49 USC §5315(a)]. Located at Rutgers University, **NTI** provides training at locations around the country to help states and localities meet the statutory requirements of the planning program. It also provides training geared to other agency needs.

The **NHI** is the technical training arm of **FHWA** and is part of the **FHWA** Office of Research and Development. **NHI's** role is to facilitate technology transfer by serving as a bridge between research and the practical application of new technology for state, local and private sector organizations involved in transportation. **NHI** makes training courses available to transportation agencies.

COURSE SCHEDULE

For **NHI** course schedules, call the contact person for the course or Mr. Al Miller of **NHI** at (703) 285-2787.

The most current schedule for any particular **NTI** course can be obtained from the **NTI** contact listed following that course's description.

■ **Design and Application of Travel
Demand Management (TDM) Tech
niques Including Telecommuting**

This four-day course is designed to show participants how to plan, develop, design, operate and evaluate **TDM** programs for the public and private sectors. Specific information will be presented on the effectiveness of a broad range of **TDM** actions that cover improved services, incentives, disincentives, and alternative work arrangements including **telecommuting**. Guidance will be presented on developing and evaluating **TDM** programs at work sites. A computer model to evaluate the impact of **TDM** programs will also be demonstrated. The lecture/discussion format provides an opportunity to understand tools developed jointly by **FHWA** and **FTA**.

Prerequisite: Participants should have employment in or responsibility for **TDM** programs.

■ **Environmental Leadership Seminar**

This seminar is intended to clarify the leadership role required to promote the new policy initiatives, tools, and methods necessitated by the emphasis on environmental preservation expressed in the US Department of Transportation Strategic Plan and the **FHWA** Environmental Policy Statement. The seminar will identify the roles of stakeholders in the transportation planning and project development process. It will emphasize communication and collaboration skills needed by managers to bring stakeholders into the process, seek new partnerships, and reach those historically underserved by the transportation system. The seminar will also discuss methods of project planning that better integrate transportation, environmental, and land use issues.

■ **Introduction to Transit**

The course will be designed to provide basic information on a wide range of transit matters. Topics will include: history of transit; history of Federal transit programs; structure of transit agencies; route scheduling; transit finance; transit/land use linkages; interest groups in transit; labor issues; transit travel and demographic characteristics; **paratransit**; and social, environmental, and energy issues. The course will include discussions relating to the joint planning regulations, livable communities, and Americans with Disabilities Act.

ABOUT NTI/AND NHI

The **NTI** was created by **ISTEA** to "...develop and administer... **training** programs. ." [49 USC §5315(a)]. Located at Rutgers University, **NTI** provides training at locations around the country to help states and localities meet the statutory requirements of the planning program. It also provides training geared to other agency needs.

The **NHI** is the technical training arm of **FHWA** and is part of the **FHWA** Office of Research and Development. **NHI's** role is to facilitate technology transfer by serving as a bridge between research and the practical application of new technology for state, local and private sector organizations involved in transportation. **NHI** makes training courses available to transportation agencies.

COURSE SCHEDULE

For **NHI** course schedules, call the contact person for the course or Mr. Al Miller of **NHI** at (703) 285-2787..

The most current schedule for any particular **NTI** course can be obtained from the **NTI** contact listed following that course's description.

